

REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claims 9 and 13 have been amended. New claims 21-23 have been added. The amendments to claims 9 and 13 and the new claims are supported by at least Figures 1-3 and the description of those Figures in the present specification. No new matter has been added.

§102 Rejection

Claims 1, 2, 7, 13, 14, 18 and 19 were rejected under 35 U.S.C. §102(b) as being anticipated by Klein (US 5,641,275). Applicants respectfully traverse this rejection.

Klein disclose a magnetically driven pump, as best illustrated in Figure 7, that includes a housing or casing 100, a shaft 126 having a groove on an exterior surface, first and second shaft supports 114, 115, a bearing 124, an impeller 120, first and second couplers 132, 134, and a containment shell 130. The second shaft support 115 is integral with the containment shell, as is clear from the cross-hatching shown in Figure 7. Klein fails to disclose a thrust ring feature that is separate from the containment shell and is positioned between the bearing 124 and the structure defined by shell 130 and support 115. The socket 117, referenced in the rejection as a thrust ring, is merely a shoulder-like surface defined in the support 115 for engagement with a flat mating surface 232 of the shaft. The socket 117 is not a separate member from the containment shell 130. Further, the socket 117 maintains contact with the mating surface 232 of the shaft because the shaft is fixed to the containment shell 130 in a stationary position.

Therefore, Klein fails to disclose "a thrust control valve including a rear thrust ring positioned between the containment shell and the rear bearing, an opening of the thrust control valve being defined by a variable spacing between the thrust ring and the rear bearing," as required by claim 1. Klein also fails to disclose "a thrust control valve including a thrust ring and a valve opening having a size defined by a relative position between the rear bearing and the thrust ring," as required by claim 19, and the method steps of claim 18 related to moving the bearing relative to a thrust ring.

Concerning claims 13 and 14, Klein fails to disclose "a stator secured at the closed end of the containment shell," as required by claim 9. Therefore, claims 13 and 14 are allowable for at least the reason they are dependent upon an allowable base claim. Applicants do not otherwise concede the correctness of this rejection.

§102/§103 Rejections

Claims 9 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over Sloteman (US 6,012,909).

Applicants respectfully traverse this rejection.

Sloteman discloses a motor pump 10 that includes a case 16, a shaft 20 secured to the case 16, an impeller 26, and a stator 48. Sloteman fails to disclose or suggest magnets used for rotating the impeller, as required by claim 9. Therefore, Sloteman fails to disclose or suggest every limitation of claim 9 and the claims that depend from it.

New Claims

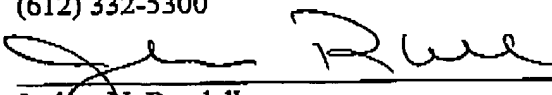
New claims 21-23 have been added. Claim 21 tracks some of the limitations of claims 1 and 3, and further requires "the inner rear wear ring mounted to the impeller and the outer rear wear ring mounted to the containment shell, wherein the rear wear rings are arranged radially relative to each other." The prior art of record fails to disclose or suggest this wear ring feature in combination with the other features of claim 21. The prior art further fails to disclose the front wear ring limitations of claim 22 or the internal channel features of claim 23. Consideration and allowance of new claims 21-23 is therefore respectfully requested.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance. If a phone conference would be helpful in resolving an issues related to this matter, please contact Applicants' attorney listed below to discuss.

Respectfully submitted,

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Date: March 3, 2006


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